FOCAL ONE

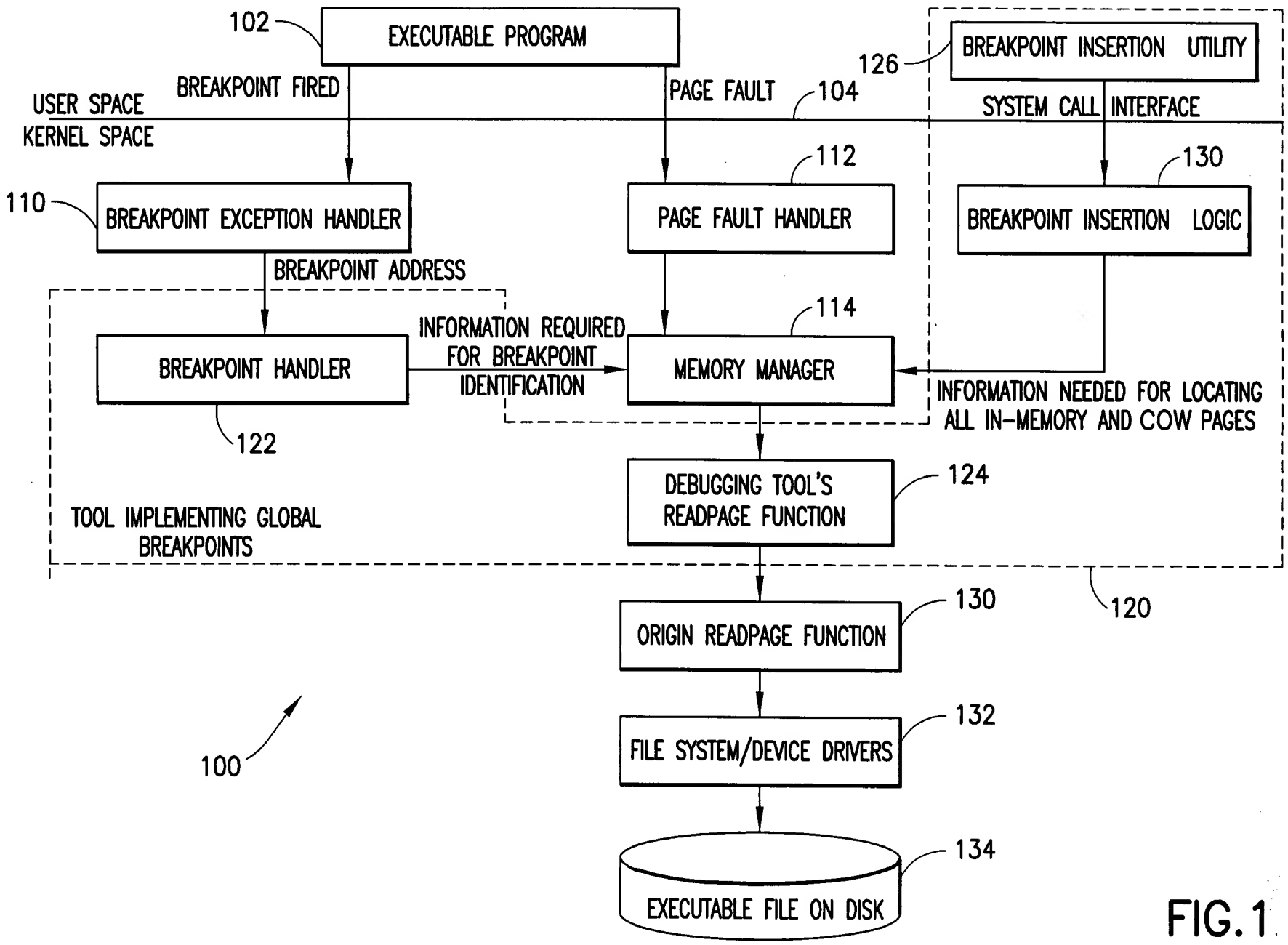

FIG.1

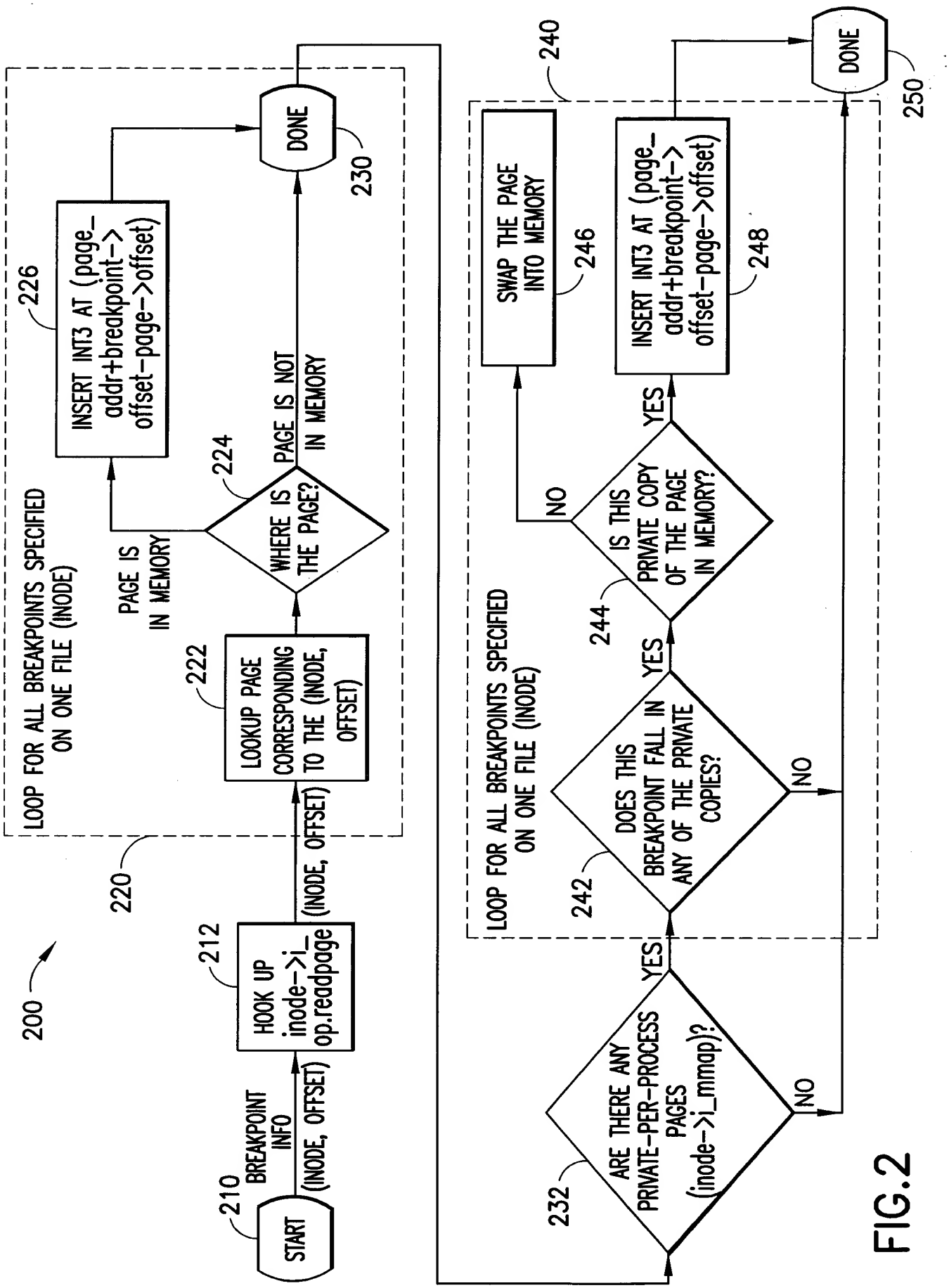
200
210
START
BREAKPOINT INFO (INODE, OFFSET)
212
HOOK UP inode->i_op.readpage
(INODE, OFFSET)
220
LOOP FOR ALL BREAKPOINTS SPECIFIED ON ONE FILE (INODE)
222
LOOKUP PAGE CORRESPONDING TO THE (INODE, OFFSET)
224
WHERE IS THE PAGE?
PAGE IS IN MEMORY
PAGE IS NOT IN MEMORY
226
INSERT INT3 AT (page_addr+breakpoint->offset-page->offset)
230
DONE
232
ARE THERE ANY PRIVATE-PER-PROCESS PAGES (inode->i_mmap)?
YES
NO
240
LOOP FOR ALL BREAKPOINTS SPECIFIED ON ONE FILE (INODE)
242
DOES THIS BREAKPOINT FALL IN ANY OF THE PRIVATE COPIES?
YES
NO
244
IS THIS PRIVATE COPY OF THE PAGE IN MEMORY?
YES
NO
246
SWAP THE PAGE INTO MEMORY
248
INSERT INT3 AT (page_addr+breakpoint->offset-page->offset)
250
DONE

FIG.2

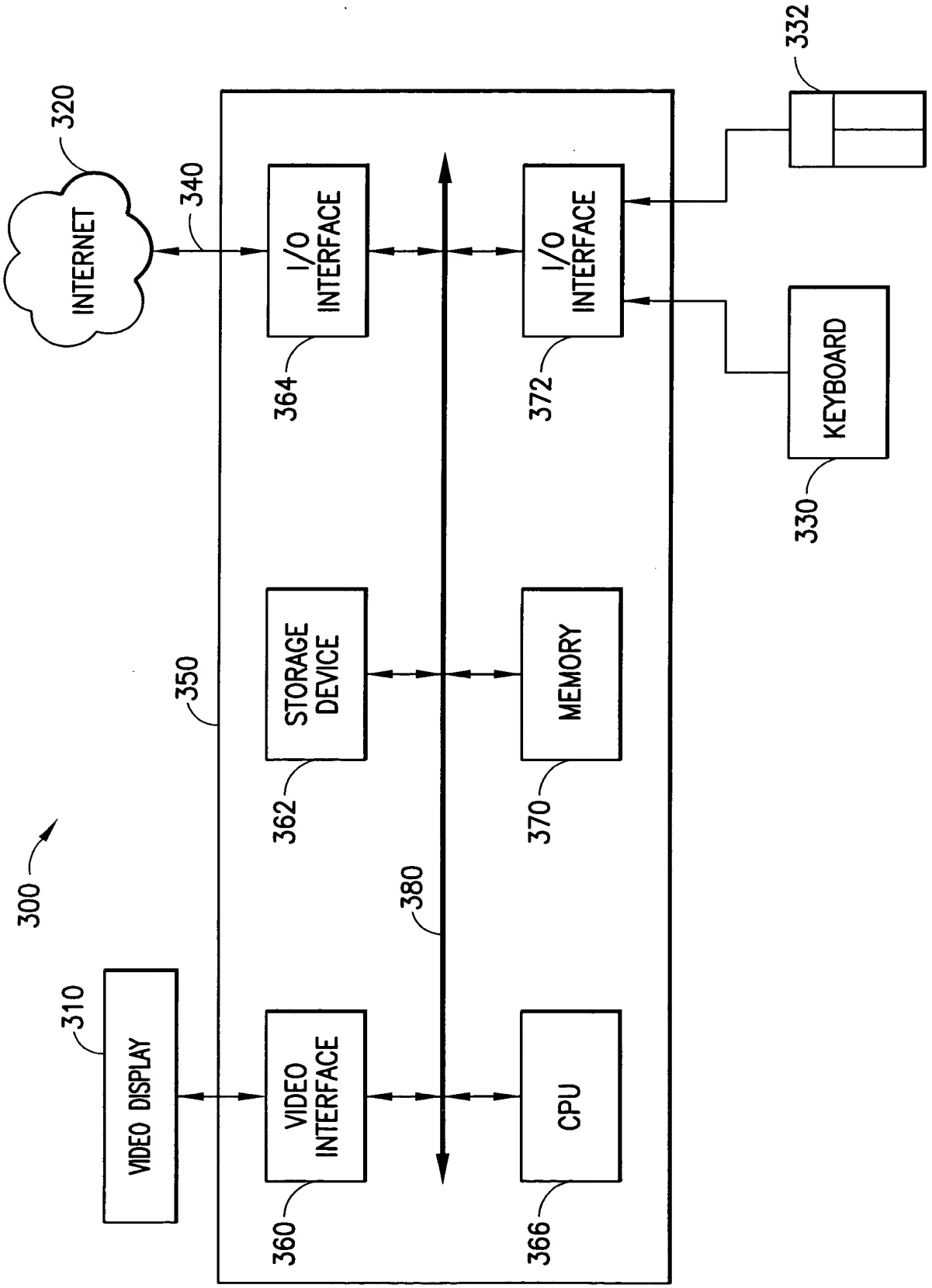
300
310
VIDEO DISPLAY
320
INTERNET
330
KEYBOARD
332
340
350
360
VIDEO INTERFACE
362
STORAGE DEVICE
364
I/O INTERFACE
366
CPU
370
MEMORY
372
I/O INTERFACE
380

FIG.3